

ABSTRACT OF THE DISCLOSURE

A method is described for transmitting/receiving STM-4 (SDH) or STS-12 (SONET) digital signals over two RF carriers in a radio regenerator section. The method provides for performing, in transmission, a de-interleaving operation of the standard frame to be transmitted in such a way as to subdivide it by columns into two sub-frames. The RSOH bytes of the standard frame are terminated and transmitted over the two working channels or over one service channel and one working channel so as to be protected in a 1+1 configuration: In reception, a column interleaving operation recombines together the two sub-frames and recovers and correctly rearranges the RSOH bytes so terminated as to obtain the standard frame originally received from the transmitter. The generated sub-frames are synchronized with the standard frame.